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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,833	01/17/2006	Koji Hamano	2005_2063A	5112
513	7590	04/03/2009	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P. 1030 15th Street, N.W., Suite 400 East Washington, DC 20005-1503			DUCHENEAUX, FRANK D	
ART UNIT		PAPER NUMBER		1794
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/564,833	HAMANO ET AL.	
	Examiner	Art Unit	
	FRANK D. DUCHENEAUX	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 14 January 2009.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-8 is/are pending in the application.
 4a) Of the above claim(s) 7 and 8 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-6 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 17 January 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date See Continuation Sheet.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :1/17/2006; 10/15/2007; 2/18/2009.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, claims 1-6 in the reply filed on 1/14/2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 7-8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/14/2009.

Priority

3. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

Specification

4. Applicant is reminded of the proper content of an abstract of the disclosure. A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a

basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should **not refer to purported merits** or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

5. The abstract of the disclosure is objected to because the recitation of “decorative layer of the” appears to be a misprint. Correction is required. See MPEP § 608.01(b).

6. The abstract of the disclosure is objected to because the last sentence is awkward in light of missing or unnecessary words/grammar. Correction is required. See MPEP § 608.01(b).

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. **Each of the lettered items should appear in upper case,**

without underlining or bold type, as a section heading. If no text follows the section heading, the phrase “Not Applicable” should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A “Sequence Listing” is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required “Sequence Listing” is not submitted as an electronic document on compact disc).

7. The disclosure is objected to because of the following informalities: See above section regarding the sections of a specification and upper-case requirements for the lettering of these sections. Appropriate correction is required.

8. The disclosure is objected to because of the following informalities: The word “sumps” on page 2, line 11; page 4, line 23 “provide” should be “provided”; page 9, line 8 “is an across-sectional” should be corrected; page 11, sentence on lines 12-17 needs to be rewritten as it is awkward; page 11, line 25 “sheet” should be “sheets”; page 15, line 7 sentence beginning “That is...” is awkward; the examiner does not understand the intended meaning conveyed in the sentence on page 16, lines 7-10. According to the figures, the coating layer 3 is on the top

surface so it is not readily apparent why is would not be seen if viewed from the upper side of panel 10 or why similarities in colors would enhance this effect; sentence on page 16, lines 20-21 is ambiguous.

Appropriate correction is required.

9. The disclosure is objected to because of the following informalities: The examiner requests that the applicant(s) maintain consistency within the specification with respect to including reference numbers with their respective text (e.g. side gate part on page 12 lines 2-3, decorative sheet on page 13, line 22, etc).

Appropriate correction is required.

10. The disclosure is objected to because of the following informalities: The examiner calls attention to the paragraph beginning on page 11, line 24 and ending on page 12, line 15. It is noted that reference is made to figures 2 and 5; however, these figures do not contain many of the reference characters cited in the text. This is repeated in the paragraph beginning on page 16, line 23 and ending on page 17, line 11.

Appropriate correction is required.

11. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

12. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “23” has been used to designate both “angle” and “inclination angle” on page 13; reference character “32” has been used to designate both “release layer” (page 18, line 13) and “peel layer (page 17, line 4)”; reference character “31” has been used to designate both “release layer” and “layer” (page 18); reference character “2” has been used to designate both “side gate mark” and “protruded part layer” (page 18); reference character “32” has been used to designate both “peel layer” and “layer” (page 19); reference character “35” has been used to designate both “transfer layer” and “layer”(page 20); reference character “34” has been used to designate both “adhesive layer” and “layer” (page 21). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

13. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "24" on page 13. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. **Claims 1-5** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, the phrase "an angle made between a cross-section of the side mark and the thickness direction of..." is indefinite as it is unclear from which direction with respect to the side mark the cross-section is taken.

Regarding claim 4, a coating layer width is not adequately defined as it is unknown as to which size of the side mark the layer width is being compared. Also, the word “approximately” is vague as it is a relative term subject to different interpretations. As such, the claim is rendered indefinite.

Regarding claim 5, it is unclear as to the relationship between the recitation, “wherein in a cross section....from the top surface of the molded resin body” and the recitation of the angle and its structural dependence. Additionally, the examiner finds the phrases “an end part of the coating layer away from the side face” and “a lower end part of the side face” unclear as these structural recitations can have multiple, and therefore indefinite, meanings.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. **Claims 1, 3 and 5-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuhara et al. (US Patent Application Publication 2004/0173940 A1) in view of Kashino (US Patent Application Publication 2003/0183495 A1). The examiner notes that ~940 is a US equivalent of WO 03013823 A1 published 02/13/2003.

Regarding claim 1 and 5, Yuhara teaches a double-face in-mold forming method (title), said method directed towards producing a protection panel (article) comprising a transparent resin that becomes united with a first continuous film and a second continuous film to form a molded product (body) (para 0084 and figure 25c, reference number 71) and that said transparent resin molded product has a height that is less than a length (flattened in a thickness direction) as demonstrated in figure 25d. Yuhara continues to teach that upon removal from a mold, the molded product is detached from the first and second continuous films between the exfoliation layer and the UV hard layers (para 0085) thereby leaving attached (coating layer) to both the opposite surfaces (top and bottom surface, figure 25d, reference characters 10 and 17, respectively) of the molded product: an adhesive layer, a printing layer (decorative layer), an anchor layer and said UV hard layer (para 0039 and figures 5a and 5b). The examiner notes that said layers attached to the top and bottom surfaces of said molded product necessarily provides said coating over (covering) the edge part of the upper surface adjacent to a side face (para 0033, lines 6-13 and figures 1a and 1b). Finally, Yuhara teaches a sprue formation portion, a formed portion remaining in the inlet, is cut off (para 0086 and figure 25d, reference character 71a), which inherently leaves a side gate mark formed on the side face of the molded product as is well

known is the art. With reference to the above passage, especially figures 1a and 1b, the examiner notes that a side gate mark formed on a side face as taught by the reference would not be visible from a top surface of the molded product as seen from any angle from 0 to 180° as would be possible above a planar surface. Yuhara fails to teach a decorative layer having an area larger than the coating layer.

However, Kashino teaches a molded resin which is translucent when solidified, fused with a translucent resin film, which comprises a graphic symbol formed thereon (para 0012). Figure 1 and 2 of the reference teach a key top body (12) and a resin film (14) adhered to 12 (on bottom surface) except on the rear surface (12a) (top surface), whereon a graphical (decorative) symbol layer (13) is formed on a rear surface (14a) of 14 and further that that 12 is formed by injection molding a translucent synthetic resin into a form (para 0024). Figure 2 also teaches a decorative layer (19) on 12a, which provides key top (11) with design diversity (para 0032, lines 9-12). Figure 2 further teaches that 14 and 13 form a decorative layer having a larger surface area than 19 (coating layer).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the invention as taught by Yuhara with the layered configuration as taught by Kashino towards an in-mold decorated product with a specific practical and aesthetic appeal as befits it's industrial and/or consumer applicability as in the present invention.

Regarding claim 3, Figures 1a, 5 and 25d of Yuhara teach a coating layer (1a and 12) formed on the entire surface of the top surface other than where the transparent window (1b) is and that this coated portion is on the edges of the top surface adjacent to the side face where the sprue formation (gate mark) portion was.

Regarding claim 6, Yuhara also teaches that said printing layers are printed on some areas of the opposite surface and not printed on other areas of the opposite surfaces forming a transparent window in the areas where the printings are not formed (para 0040 and figures 5a, 5b and 5c) and that areas associated with reference characters 1b and 2b of figures 1a and 1b are a transparent display window (display screen part) (para 0033, lines 712).

19. **Claim 2 and 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Yuhara et al. (US Patent Application Publication 2004/0173940 A1) and Kashino (US Patent Application Publication 2003/0183495 A1) in view of Isao (Patent Abstracts of Japan Publication Number 2001-277288) and in further view of Miyajima (US 5824252).

Regarding claim 2, Yuhara and Kashino teach the resin molded product as in the rejection of claim 1 above. Yuhara also teaches a protection panel used as a display window for a cellular phone (para 0033, lines 1-4). Figure 2 of Kashino also teaches a gate mark (17) at 0° with surface (12a) of key top body (12) (para 0034). Yuhara and Kashino fail to teach a side gate mark with a thickness of 0.4 mm in the thickness of a molded resin body and an angle made

between a cross-section of the side gate mark and the thickness direction of the molded resin body is 0 to 60°.

However, Isao teaches a thin-walled window covering for a portable telephone by inserting a decorative film having a transparent window part formed in a mold capable of a molding resin molded article having a main body thickness of 0.8-3.0 mm and a pawl part to perform injection molding (abstract). Additionally, Miyajima teaches a method of resin molding and resin molding machine for the same (title and figure 2), said methods employing gates (18) generating a gate mark (18a) formed on the side edges of the cavities (11) (column 6, lines 21-34 and figures 4A, 4B and 5). Miyajima also teaches a depth of the gate connected to the cavity is limited to about 50% of the thickness of the package section (column 10, lines 26-28) and figure 5 of the reference teaches a gate mark (18a) formed by injecting resin into gate (18) has an angle with the thickness direction of greater than 0° and less than 90°. Miyajima further teaches a wide gate connected to a cavity so that resin melt can be efficiently filled into the cavities in a short time without accelerating the resin, thus preventing voids in the resin so that reliability and quality of molded products can be improved (column 10, lines 17-23). Isao and Miyajima fail to teach a range of a thickness of a gate mark of 0.4 mm.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a resin molded product for use as a display window in a cellular phone as taught by Yuhara and Kashino with a resin body of a thickness as taught by Isao and further to provide a gate for injecting resin into a cavity for molding a molded article, and thus a gate mark,

at a specific angle and with a specific width and depth commensurate with the desired thickness of the molded article so as to maximize the efficiency of manufacturing said article while maintaining said articles quality as in the present invention.

Regarding claim 4, Yuhara and Kashino teach the resin molded product as in the rejection of claim 1 above. Yuhara and Kashino fail to teach a coating layer formed to have a width along the side face which is approximately equal to a size of the side gate mark along the side face.

However, as state above for the rejection of claim 2 in regards to the dimensionality of Miyajima's gate and a gate mark inherently generated from said gate, it would have been obvious to one of ordinary skill in the art at the time of the invention to adjust the size of the gate along a side face of a molded article for the intended application since it has been held that discovering an optimum value of a result-effective variable involves only routine skill in the art (*In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)) and to provide a coating layer of a width that matches the size of the gate mark generated by said gate towards a molded article with symmetric and aligned features that provide a more appealing presentation.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 2001/0040001 A1, US 2005/0116386 A1, US 4917927, US 5922369, US 2001/0038493.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK D. DUCHENEAUX whose telephone number is (571)270-7053. The examiner can normally be reached on M-Th, 7:30 A.M. - 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie E. Shosho can be reached on (571)272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FDD

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794